

Supplementary Notes on the Arachnida and Myriopoda of the Mergui Archipelago : with Descriptions of some New Species from Siam and Malaysia. By R. I. POCOCK, of the Natural History Museum. (Communicated by W. PERCY SLADEN, Sec. Linn. Soc.)

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(PLATE XXII.)

THE specimens which form the subject of the present supplementary note upon the fauna of the Mergui Archipelago, were unfortunately overlooked when Dr. Anderson's collection was originally distributed to the various specialists who have reported upon it.

These specimens were contained in two bottles—one being ticketed Mergui, the other Owen's Island. Something of interest was found in each bottle—two of the Myriopoda from Owen's Island proving to be new species, while several examples of a large Tetrapneumonous spider from Mergui appear to be representatives of a new genus.

ARACHNIDA.

Order SCORPIONES.

PALAMNÆUS SPINIFER (*Hempr. & Ehrb.*).

Heterometrus spinifer, *Hempr. & Ehrb. Symb. Phys. Scorpiones*, p. 3, pl. i. fig. 2 (1829).

Palamnæus Petersii, *Thorell, Ann. Mag. Nat. Hist.* (4) xvii. p. 13; *id. Actes Soc. Ital. Sci. Nat.* xix. pp. 214–217 (exclusive of synonymy).

Dr. Anderson obtained this species at Mergui. It is widely distributed in Further India and the Malay Archipelago, having been recorded from many localities between Bengal and Singapore. For a discussion of the above-given synonymy, and for further details respecting distribution, see Pocock, *Ann. Mag. Nat. Hist.*, Jan. 1892, pp. 38–41.

Order PEDIPALPI.

HYPOCTONUS FORMOSUS (*Butler*).

Thelyphonus formosus, *Butler, Ann. Mag. Nat. Hist.* (4) x. pp. 203, 204, pl. xiii. fig. 4.

Thelyphonus angustus, *Stoliczka, Journ. As. Soc. Bengal*, xlii. p. 134, pl. xii. fig. 3.

Hypoctonus formosus, Thorell, *Ann. Mus. Genov.* xxvi. p. 360; *id. loc. cit.* xxvii. pp. 542-553 (1889).

Thelyphonus insularis, Oates, *Journ. As. Soc. Bengal*, lviii. (2) p. 13, figs. 7 & 8 (1889).

A single example was obtained on Owen's Island.

The species appears to be tolerably common in the southern parts of Burma. It was originally described from Moulmein, and has subsequently been recorded from Tenasserim and elsewhere. The name *angustus* is included in the above synonymy on the authority of Dr. Thorell and Mr. E. W. Oates. Mr. Oates has kindly presented to the British Museum a large number of specimens of his species *insularis*, which were obtained on Double Island. There can, however, I think be little doubt that these examples are specifically identical with Butler's type of *formosus*.

Order ARANEÆ.

Fam. EPEIRIDÆ.

NEPHILA MACULATA (Fabr.).

Hab. Mergui.

Fam. THERAPHOSIDÆ.

SELENOCOSMIA JAVANENSIS (Walck.).

Hab. Mergui. A single female example, giving the following measurements:—Length of body 54 millim., of cephalothorax 23·5; width of cephalothorax 20; length of maxilla and palp 53·5, of 1st leg 81, of 2nd 70, of 3rd 64, of 4th 82·5, of posterior mamilla 14·5; length of sternum 10·2, width 10; length of labium 3·5, width 4.

ORNITHOCTONUS ANDERSONI, gen. et sp. nov. (Pl. XXII. figs. 1-3.)

Colour a deep coffee-brown, clothed with paler brown hairs.

Cephalothorax longer than wide, high in the cephalic region, the anterior third of the upper surface (in the middle line) nearly horizontal, but sloped slightly downwards and forwards, the posterior two thirds sloped upwards at about an angle of 40°; the sides strongly sloped from the middle line. The radiating grooves defined. The fovea conspicuous, linear, transverse. Ocular tubercle well defined, wider than long, separated from the anterior border by a space equal to half its width; the eyes set

almost exactly as in *Selenocosmia javanensis*, but a little closer together.

Mandibles similar to, but a little weaker than, those of *Selenocosmia javanensis*, unarmed in front; *maxillæ* also as in that species.

Palpi and *legs* shorter and more robust than in *Selenocosmia*; distal tarsal segments scopulate, the proximal tarsal completely scopulate on the first pair, nearly completely on the second, half covered on the third, and with only its distal third so furnished on the fourth. All the scopulæ very large and undivided, except those on the proximal tarsal of the fourth pair of legs, which are in two complete halves. A single sharp black spine on each side of the lower surface of the distal extremity of the tibial segments of each pair of appendages; for the rest the segments are unarmed, except for the two terminal claws. The first leg a little shorter than the fourth.

Sternum considerably longer than wide; the *labium* defined behind by a deep groove, nearly twice as wide as long, convex along its free border, and not quadrate.

The *abdomen* rounded or ovate.

The *posterior spinners* short, not so long as the patella of the third pair of legs, and less than a third of the length of the cephalothorax; the segments subequal in length.

Measurements in millimetres.—Length of cephalothorax 25·5, width 21, of cephalic portion 15·5; distance of fovea from anterior margin 17; width of ocular tubercle 3·3; length of abdomen 30, width 22, height 19; length of sternum 12·5, width 19; width of labium 3·5, length 2·5; length of appendages (including coxal segments), palp 52·5, 1st leg 74, 2nd 67·5, 3rd 55, 4th 74, length of superior mamilla 7·5.

Hab. Mergui. Dr. Anderson obtained several examples of this fine spider. They were discovered beneath large stones, squatting with their egg-cases in shallow excavations of the soil.

According to Simon's recent revision of the Theraphosæ, the genus falls into the tribe *Theraphosæ* of the subfamily *Avicularinæ*. It cannot, however, be confounded with any of the genera of this tribe.

EXPLANATION OF PLATE XXII.

- Fig. 1. *Ornithoctonus Andersoni*, gen. et sp. nov.; nat. size, from above.
2. Lower surface of cephalothorax; nat. size.
3. Ocular tubercle, enlarged.

MYRIOPODA CHILOPODA.

Fam. SCOLOPENDRIDÆ.

OTOSTIGMA OWENII, sp. n.

Colour (in alcohol) a pale olivaceous, the first tergite and head partly ferruginous; anal legs green.

Moderately slender, attenuated anteriorly.

Head smooth, only finely punctured; antennæ moderately long, composed of 18–21 segments, the basal three of which are naked. The dental plates of the maxillary coxæ nearly in contact, each armed with four sharp teeth.

The *tergites* obsoletely wrinkled posteriorly, not spicular, from the 6th bisulcate, from the 15th with elevated margins. *Sternites* smooth, not tubercular, only obsoletely impressed at the hinder end of the body, marked in front with two posteriorly abbreviated sulci.

Anal somite small, the *tergite* with a conspicuous posterior median impression; the *pleuræ* thickly studded with small, close-set pores, the posterior prolongation short, forming an angle of about 45° , furnished with one lateral and three apical spines; *sternite* much narrowed posteriorly, its sides lightly convex, its posterior border emarginate; *legs* long and slender, tarsus unarmed, femur armed with 11 spinules—2 on the upper inner edge (1 terminal and 1 median), 5 in two series on the under inner edge, and 4 in a single series on the under outer edge.

Legs, tarsi of 20th unarmed, of 19th armed with one spur, of the rest armed with at least two spurs.

Length 38 millim.

Hab. Mergui. A single example from Owen's Island.

The specimen here described I cannot definitely refer to any known species. The genus *Otostigma*, however, is exceedingly difficult to understand; and it is impossible to feel absolute confidence in the stability of a species, especially when it is based upon a single example.

SCOLOPENDRA DE HAANII, *Brandt*.

Hab. Mergui, Owen's Island.

MYRIOPODA DIPLOPODA.

Fam. POLYDESMIDÆ.

STRONGYLOSOMA SETOSUM, sp. n.

Colour (in alcohol) uniform testaceous throughout.

(Head and anterior 4 somites missing.) The keel-bearing portion of the rest of the somites thickly beset above and at the sides with long setæ, which project in all directions, and distinctly covered with squamiform granules. The transverse sulcus distinct. The keels small and slender, but distinct, situated in about the middle of the side, as long as the part of the tergite that bears them, their anterior angle nearly rectangular, the posterior acute and spiniform, the lateral edge armed with from 3 to 5 distinct sharp teeth. Anal tergite, sternite, and valves of normal form; the tergite stout, distally narrowed, truncate, the sternite posteriorly convex, the tubercles small. The sterna transversely and longitudinally grooved, not spined.

Copulatory feet long and slender, formed almost as in *Paradermus coarctatus*, the third segment long and cylindrical, and terminating distally with two slender curved processes which are closely applied together.

Length of specimen 19 millim. (when complete probably about 24 millim.).

Hab. Mergui. A single example from Owen's Island.

In spite of its damaged state, I have no hesitation in describing this specimen as the representative of a new species. It is entirely peculiar in its hairiness and in its dentate keels.

The following new species of *Spirostreptus* are closely allied to *S. opinatus* and *S. aterrimus*, which Dr. Anderson obtained at Mergui.

They have the following features in common :—

Head smooth, with a superior crenulate ridge; frontal sulcus conspicuous, and extending to a point in a line with the inner angles of the eyes. *Eyes* separated by a distance that is greater than a diameter.

Antennæ with the second segment the longest. The *first tergite* smooth, extending laterally and inferiorly below the level of the second; the rest of the tergites marked with a complete

transverse sulcus, the anterior covered portion finely concentrically striolate, the posterior portion smooth, or nearly so, above, longitudinally striate below, the striae not extending as high as the pore; pores situated in about the middle of the side, small just behind the transverse groove, which at this spot is lightly sinuate; *sterna* smooth; *ventral grooves* long and deep. *Anal tergite* produced into a caudal process, which overhangs the valves and is slightly upcurled at the apex (except in *S. Hosei*); *valves* convex, with compressed or sulcate margins; *sternite* triangular. *Legs* (in ♂) smooth above, the segments bearing a few hairs below, a spine above the claw and a few in two series on the lower surface of the terminal segment, which is not padded beneath; penultimate and antepenultimate padded beneath.

SPIROSTREPTUS BOWRINGII, sp. n.

♂. *Colour* (faded) mostly ochraceous, the hinder borders of the tergites castaneous; antennæ and legs concolorous, ochraceous. Distance between the eyes nearly twice a diameter.

Antennæ long, extending beyond the hinder margin of the first tergite.

First tergite moderately narrowed laterally, the anterior angle nearly a right angle, the margin thickened and defined by a strong sulcus, the posterior border lightly emarginate, the posterior angle also nearly a right angle, smooth or marked posteriorly with a few abbreviated sulci.

Anal tergite flat above from behind forwards, not transversely constricted, the caudal process slender, pointed, and upcurled; *valves* with their posterior border very lightly convex, margins strongly compressed, but hardly thickened; the *sternite* defined by a groove.

Copulatory feet—anterior lamina flat, slender, and diverging above, expanded and converging below, the inner edge of the terminal expansion emarginate and denticulate; the protrusible portion terminating in a lamelliform piece, and bearing two long, slender, subequal styles, which curve towards each other.

Number of segments 60.

Length 158 millim.

Hab. A single male example from Siam (*J. C. Bowring*).

Closely related to *Sp. opinatus*, Karsch, from Tenasserim and Mergui (*vide* Pocock, Journ. Linn. Soc., Zool. xxi. pp. 294, 295, pl. xxv. figs. 2-2*c*), but differing at least in the form of the

copulatory feet, the anterior lamina of which in *opinatus* is cut out so as to form two strong pointed styles.

SPIROSTREPTUS PERAKENSIS, sp. n.

♂. Colour black, polished; legs and antennæ reddish yellow.

Eyes separated by a space which is a little greater than a diameter. Antennæ long, projecting beyond the first tergite.

First tergite wide laterally, without striæ, the anterior angle rounded, very slightly obtuse, the margin thickened and defined by a strong sulcus, the posterior angle rectangular, the edge of the tergite above it very slightly emarginate. Rest of the tergites smooth and shining behind, the striæ falling considerably short of the pore.

Anal tergite with a light constriction, the process slender and short; valves strongly convex, margins strongly but narrowly compressed; sternite without a defining sulcus.

Copulatory foot with anterior lamina narrow above, expanded below, the inferior edge emarginate and bearing a median

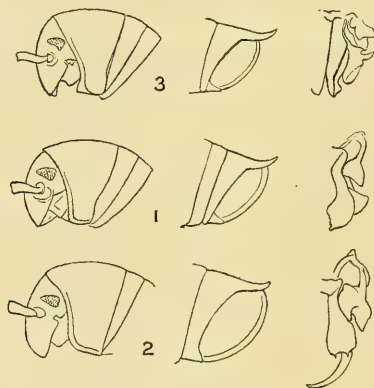


Fig. 1. *Spirostreptus Bowringii*, sp. n. Anterior and posterior extremities of body and front view of left half of copulatory organ.

Fig. 2. *Spirostreptus perakensis*, sp. n. Ditto.

Fig. 3. *Spirostreptus Patricii*, sp. n. Ditto.

spinule; the proximal spur of the protrusible portion very long and strong, the spurs on the base of the lamelliform portion short and more slender.

Number of somites 69.

Length about 210 millim.

Hab. A single male example from Perak (Malay Peninsula). Presented to the British Museum by J. H. Leech, Esq.

Very closely allied to *Sp. aterrimus*, Pocock, from Mergui, but having the legs and antennæ reddish yellow and concolorous, instead of fusco-annulate. Moreover, in *aterrimus* the inferior border of the anterior lamina of the copulatory foot is entire and not denticulate, and the large spur of the protrusible portion is hooked at the apex.

SPIROSTREPTUS PATRICII, sp. n.

♂. *Colour*—head castaneous below, olivaceo-fuscous above; antennæ olivaceo-fuscous, pale at the base; somites castaneous posteriorly; legs olivaceo-fuscous, testaceo-annulate.

Eyes separated by a distance about equal to a diameter and a half. *Antennæ* extending beyond the first tergite.

First tergite laterally slender, with its anterior angle slightly produced and much thickened, the posterior angle nearly a right angle, the anterior and posterior borders very lightly emarginate. Rest of the tergites very smooth posteriorly, the suture deep but not conspicuously crenulate, the lateral striæ extending nearly as high as the pore.

Anal tergite not constricted, the caudal process very long, slender, and upcurled; *valves* with their margins convex and not deeply compressed; the *sternite* defined by a groove. The coxal segment of the posterior pair of legs of the somites at the hinder end of the body bearing each a small tubercle.

Copulatory feet—anterior lamina slender, narrowed below, and externally hollowed, the protrusible portion terminating in a simple, apically spined lamelliform piece which does not support styliform spurs.

Number of somites 54.

Length about 120 millim.

Hab. A single male example from Batavia (*R. Kirkpatrick*).

Allied to *S. javanica*, Br., as shown by the form of the copulatory organ, but differing in the details of this apparatus, in having the anterior angle of the first tergite more produced, the legs and antennæ of a different colour, &c.

SPIROSTREPTUS HOSEI, sp. n.

Colour black or reddish black, the labial region, tip of caudal process, and margins of valves ferruginous; antennæ and legs fulvous, concolorous.

Eyes separated by a distance that is a little greater than a diameter. *Antennæ* shorter, only projecting beyond the first tergite by the terminal segment.

First tergite narrowed laterally, without grooves or ridges, the posterior border strongly emarginate, and the posterior angle acute; the anterior angle rounded and very obtuse, the margin thickened and defined above by a sulcus, which inferiorly disappears and expands into a depressed area. Rest of the tergites very lightly longitudinally rugulose behind, the striæ anteriorly extending nearly as high as the pore, but posteriorly reaching only halfway up. *Anal tergite* slightly constricted above, the caudal process robust, blunt, and not upcurled at the apex; the *valves* projecting posteriorly in their upper half, and widely compressed but not sulcate above, not compressed below; *sternite* not defined by a sulcus.

Copulatory feet with anterior lamina narrow above, expanded and spatulate below; the spurs on the protrusible portion rising on the same level at a point distal to the point of origin of the membranous lamelliform piece, one of them about twice the length of the other, and more slender and curved.

Number of somites 69.

Length nearly 200 millim.

Hab. A single male example from Baram, N.W. Borneo (*C. Hose*).

This species differs from all the preceding in having the anterior angle of the first tergite very obtuse, and the posterior acute and slightly produced; and in that the caudal process is stouter, blunt, not upcurled, and the margins of the valves are not compressed below.

SPIROSTEPTUS EVERETTII, sp. n.

Colour almost as in the preceding, but with the legs and antennæ brighter, and the whole anal somite black.

Eyes separated by a distance a little greater than a diameter. *Antennæ* short, overlapping the first tergite by their apical segment.

First tergite laterally narrowed, the anterior and the posterior border lightly emarginate, the anterior angle rounded and very obtuse, the posterior angle blunt, but smaller than a right angle. The rest of the tergites smooth above, the striæ even at the hinder end extending almost up to the pores.

Anal tergite lightly constricted; caudal process punctulate, moderately robust, the apex slightly upturned; the *valves* large and prominent, their margins evenly convex and strongly sulcate from top to bottom; the *sternite* defined by a groove.

Copulatory feet with the anterior lamina narrowed above, dilated and internally notched below, with its inner angle adorned with an inwardly directed spur; the protrusible portion armed with a single stout spur at the base of the terminal membranous expansion.

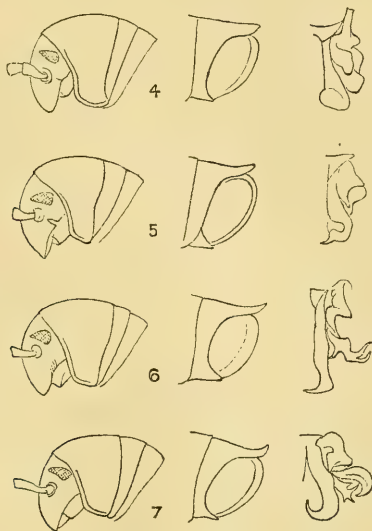


Fig. 4. *Spirostreptus Hosei*, sp. n. Anterior and posterior ends of body, and front view of left half of copulatory organ.

Fig. 5. *Spirostreptus Everettii*, sp. n. Ditto.

Fig. 6. *Spirostreptus baluensis*, sp. n. Ditto.

Fig. 7. *Spirostreptus dulitianus*, sp. n. Ditto.

Number of somites 65.

Length about 150 millim.

Hab. A single male example from N.W. Borneo (*R. Everett*).

Somewhat resembling the preceding (*S. Hosei*) in the shape of the first tergite, but differing in the form of the copulatory feet, of the anal valves, &c.

SPIROSTREPTUS DULITIANUS, sp. n.

♂. *Colour* black, caudal process and anal valves ferruginous, the latter mesially infusate; antennæ and legs flavous.

Body long and slender.

Distance between the eyes greater than a diameter.

Antennæ extending beyond the first tergite.

First tergite laterally but little narrowed, without striæ, the anterior angle obtusely rounded, the posterior rectangular.

Tergites smooth and polished, the posterior portion elevated, the striæ never extending so high as the pore.

Anal somite: caudal process apically upcurled, projecting considerably beyond the valves, the margins of which are thick; *sternite* not defined by a sulcus.

Legs moderately long.

Copulatory feet with the anterior lamina presenting the form of a strong inwardly directed hook; the protrusible part terminating in two processes, one of which is laminate and curled, the other shorter, bears a strong tooth near its point of origin, and is armed apically with four smaller teeth.

Number of somites 68.

Length 170 millim., width 10 millim.

Hab. A single male example from Mount Dulit, N.W. Borneo (*C. Hose*).

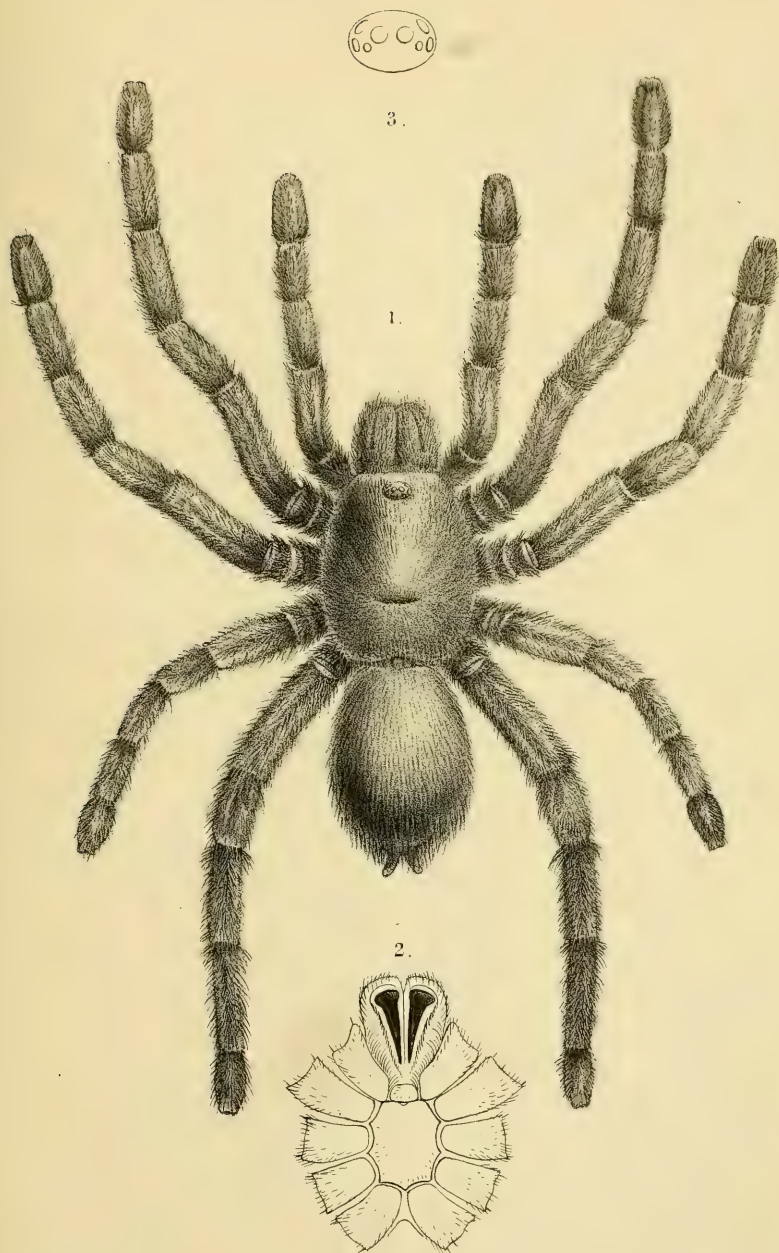
SPIROSTREPTUS BALUENSIS, sp. n.

♂. So closely allied to the preceding that a detailed description is unnecessary.

Colour as in *S. dulitianus*. Body more robust. The lateral extension of the first tergite thinner, the posterior border lightly emarginate above the posterior angle, the anterior angle a little more obtuse. The posterior half of the tergites scarcely elevated. The copulatory foot with its anterior lamina thinner than in *S. dulitianus*, the extremity being much less strongly curved; the protrusible portion terminating in a curled laminiform sclerite, and bearing four sharp spurs, three (two very long) at the base of the lamina, and another halfway along the cylindrical basal portion.

Number of somites 67. Width 12.2 millim.

Hab. A single male example from Mount Kina Balu, N.W. Borneo (*J. Whitehead*).



J. Green del. et lith.

Mintern Bros. imp.

ORNITHOCTONUS ANDERSONI, Pocock, (Nat. size).

P 317